UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

WA 7152
17(a)
9/29/94

September 29, 1994

Reply To
Attn Of: HW-104

MEMORANDUM

SUBJECT: Northwest EnviroService Closure Plan

FROM: Marcia L. Bailey, Environmental Scientist
RCRA Compliance Section

TO: Kevin Schanilec, Environmental Engineer
RCRA Compliance Section

FILE COPY

At your request, I reviewed the clean-up levels proposed by Northwest EnviroService (NWES) for clean closure of four units at its hazardous waste management facility on Airport Way South in Seattle. The levels were included in the Closure Plan dated July 1994 and in an attachment to a letter to you dated August 3, 1994.

Although I attempted to single out the clean-up levels for review, it was not possible to do so without reviewing the entire Closure Plan. Therefore, my comments are not limited to proposed clean-up levels. In addition, I requested a review of NWES's Sampling and Analysis Plan (Appendix A to the Closure Plan) from EPA Region 10's Office of Quality Assurance. The comments received from Bob Melton of that office are attached. The deficiencies of the Closure Plan cited in that document are not reiterated here, although I endorse them. A minor exception is the reference to TAL inorganics and TCL organics, which are lists of hazardous substances used by the Superfund program. It would be more consistent with the RCRA program to cite the list of hazardous constituents provided at 40 CFR Part 261 Appendix VIII, although technically either reference would adequately address the analytical needs for determining clean closure at NWES. The primary point is that NWES has not proposed an analytical plan that would account for all of the hazardous wastes and hazardous waste constituents which reasonably could be construed to have been received in the units which the company intends to clean-close. Only a very limited subset of hazardous constituents has been proposed, which is not acceptable except for screening purposes. In addition, the methods which NWES proposed for determining risk-based clean-closure levels are inappropriate and inadequate for the facility.

It is not clear from the information provided in the Closure Plan whether any or all of the three tanks have secondary containment meeting the requirements of 40 CFR § 265.193(b) through (f). An owner/operator of a tank not meeting those requirements and which has not received a variance under 40 CFR § 265.193(g), must prepare a contingent post-closure plan for closure as a landfill (40 CFR § 265.198(c)).

At various locations in the Closure Plan, NWES indicates that failure to achieve clean closure would be covered by actions proposed in an RFI workplan. However, in Section 7.0, it is correctly stated that post-closure as a landfill will be conducted if clean closure is not achieved. Regardless of the status of the submittal of an RFI workplan, the requirements for the submittal of post-closure plans (and the requisite public comment periods) must be followed for regulated units which are not clean-closed. For example, in the state of Washington, an owner/operator of a surface impoundment who intends to clean-close the unit, but later finds it impracticable to do so, must submit a post-closure plan within 90 days of the date that either the owner/operator or the authorized state determines that the surface impoundment cannot be clean-closed (40 CFR § 265.118(a)).

Following are my specific comments on the NWES proposed Closure Plan. The regulations cited have been adopted by reference into the Washington Administrative Code.

Page 1, Section 1.0, Introduction

It should be made clear in the introduction that of the four units covered in the Closure Plan, three are tanks and one is a surface impoundment. The current wording is confusing and misleading, in that the surface impoundment is referenced as a tank, and two of the tanks are referenced as sumps. The regulatory definitions should be adhered to throughout this document.

The second paragraph implies that "the RCRA violation complaint" influenced the content of the Closure Plan, but does not sufficiently identify the complaint. Since the complaint is cited, as is a letter from Ted Yackulic, as being important to the Closure Plan, they should be appended to the plan. The plan should be a stand-alone document that the public can evaluate in full during the public comment period. All other documents which NWES cites in support of the proposed Closure Plan, such as integrity tests of the regulated units, should be appended.

Page 1, Section 1.1, Closure Activities

The fourth bullet item should be amended to more correctly reflect the fact that soil sampling will be conducted to "determine whether releases from the units occurred," rather that to "verify that clean closure occurred."

Page 3, Section 1.1 (continued), second paragraph

The third sentence states that "these units are tanks," referring to all four units. This should be corrected to indicate that one unit is a surface impoundment.

Page 3, Section 1.2

There should be a statement reflecting the fact that the Department of Ecology may amend the plan after the public comment period, prior to its approval.

Page 4, Section 2.2, OWS Tank

The closure requirements to which this tank is subject should be identified (viz., 40 CFR Part 265 Subparts G and J). The information provided under "Operational Information" is for a currently-operating tank which receives only non-hazardous waste. What hazardous wastes were ever received into the unit? All of the hazardous constituents which reasonably could be construed to have been managed in the tanks must be analyzed for in order to determine whether clean closure has been achieved. Does this unit have secondary containment?

Page 5, Section 2.3, Large Pit

This unit is a surface impoundment and should be identified as such, and the regulatory closure requirements to which it is subject should be given (viz., 40 CFR Part 265 Subparts G and K). Under "Operational Information," there is an implication that the unit is still in operation; the operational status of this unit should be made clear. Also, the Closure Plan must identify all hazardous wastes which have been managed in the unit.

Page 6, Section 2.4, Sump No. 2

This unit is a tank and is subject to the closure requirements of Subparts G and J, which should be stated, as should the dates of service of the unit. All hazardous wastes ever placed in the unit must be identified in order to determine the necessary analyses that must be conducted

for a determination of clean closure. As mentioned previously, it is not clear whether this unit has secondary containment.

Page 9, Section 2.5, Sump No. 4

This is a tank and is subject to the same requirements for closure as stated above for Sump No. 2. The Closure Plan must identify its dates of service and all hazardous wastes which were received in the tank.

Page 9, Section 2.6, Potential Historical Contaminants

Indicator parameters are insufficient to determine whether clean closure has been achieved. A subset of the 40 CFR Part 261 Appendix VIII list of hazardous constituents may be sufficient for analysis if it can be determined reliably what hazardous waste constituents were received into each unit.

Page 10, Section 4.2, Specific Performance Standards

Rinsate samples are not valuable in determining whether decontamination has occurred, for at least two reasons:

- the degree of dilution is unknown, and therefore the results are not comparable with any standard;
- water is not an appropriate solvent for most constituents associated with petroleum. A wipe test similar to that prescribed under TSCA for PCBs may be appropriate.

Testing of "subsurface soils" is insufficient to determine whether the units have released hazardous constituents to soil. Soil samples should be taken immediately beneath the bottom of the unit. A single core sample is insufficient, especially when it is arbitrarily obtained in the center of the base of the unit (see p. 3-1, section 3.1). Sample locations should be selected for each unit based on the highest likelihood of the location of a release, such as low points, cracks, seams, stains, etc. In the absence of such factors, sample locations should be determined on a random basis.

Page 11, Table 4-1

Closure performance standards for rinsate ("water" on the table) are not appropriate, for the reasons described above. Closure standards for soil must include all hazardous

constituents which may reasonably be construed to have been received in each unit. For example, all VOCs, semivolatiles and metals which may be associated with petroleum as well as any other wastes which may have been received into the units must be analyzed.

It is not appropriate to use clean-up standards which were developed for the Superfund Record of Decision for Harbor Island, as that document represents the results of an intensive, site-specific risk and exposure analysis which has not been conducted for NWES. No information is presented in the Closure Plan to eliminate the consideration of ground water which flows beneath NWES as a potential source of drinking water.

Also, Method C of MTCA is not appropriate to use to derive clean-up standards for NWES (See WAC 173 303-610(2)(b)(i)). Method C does not take into consideration the protection of ground water, and assumes there will be institutional controls and subsequent monitoring. If NWES wishes to use MTCA standards for proposing clean-up values, Methods A or B would be acceptable. Under any circumstances, NWES must justify the proposal of any exposure assumptions which are less protective than residential.

Page 12, Section 5.3, Decontamination of Units

If "cracks or openings" are found in the bottom surfaces of the units, the soils immediately beneath should be sampled and analyzed for the presence of hazardous constituents.

Page 14, Section 5.4, Performance Standard Verification

If EPA-approved clean-closure levels for a given unit are not met, NWES must submit a post-closure plan for that unit (see Section 7.0, page 18).

Page 15, Section 5.4, Table:

TCLP metals are not appropriate for determining the achievement of clean-closure. The analytical parameters must include total metals as well as VOCs, semivolatiles and any other hazardous constituents which reasonably could be construed to have been received in the units.

Page 15, Section 5.5, Quality Assurance

I did not find reference to the following items in the attached sampling and analysis plan, as indicated in this section: data reduction, validation, and reporting; data

precision, accuracy and completeness; and corrective actions.

Page 18, Section 7.0, Post Closure Plan/Contingent Closure Plan

Although the title indicates otherwise, the text in this section does not include any mention of contingent closure plans. There should be consistency throughout the Closure Plan as to what circumstances may require the submittal by NWES of post-closure plans or contingent post-closure plans pursuant to the applicable regulations.

I hope these comments and those attached prove to be of assistance to you in your review of this document.

Attachment

bc: Betty Wiese, w/o att.
Bob Melton, w/o att. (ESD)
Judi Schwarz, w/o att.

Policy File: No
RCRIS: No